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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,754	12/21/2000	Barry M. Verdegan	4191-00043	1068

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EXAMINER	
REIFSNYDER, DAVID A	
ART UNIT	PAPER NUMBER

1723

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .	Applicant(s)	
09/745,754	VERDEGAN ET AL.	
Examiner	Art Unit	
David A Reifsnyder	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2002.
- 2a) ☐ This action is **FINAL**.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-93 is/are pending in the application.
 - 4a) Of the above claim(s) 24-27, 33-87, 92 and 93 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23, 28-31 and 88-91 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some * c) ☐ None of:
 - 1. ☐ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 - * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 and 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Election/Restrictions

Applicant's election with traverse of the Invention of Group I-Species II, corresponding to claims 1-23, 28-32 and 88-91, in Paper No. 10 is acknowledged. The traversal is on the grounds that the applicant believes that the application may be more efficiently examined if all of the Groups identified by the Examiner were searched at one time. This is not found persuasive because searching all of the inventions at one time would be a serious burden for the reasons stated in paragraphs 4 and 5 of the restriction requirement mailed on September 23, 2002. The reasons that searching all of the Groups at one time would be a serious burden is that the Groups have acquired a separate status in the art as shown by their different classification, and the search required for Group II is not required for Groups I & III. Furthermore, while not mentioned in the restriction requirement mailed on September 23, 2003, a large portion of the search required for Group I is not required for Group III.

The requirement is still deemed proper and is therefore made FINAL.

Claims 24-27, 33-87, 92 and 93 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 10.

In the Specification

All of the U.S. Application Serial No's listed on page 1 of the specification have become U.S. Patents; therefore, the Patent No's of those Applications should replace or be added to those Application Serial No's. Furthermore, U.S. Application Serial No. 09/210,363 is listed on pages 1 and 5 of the specification; therefore, the corresponding Patent No. for Application Serial No. 09/210,363 should replace or be added to the Application Serial No. 09/210,363 on pages 1 and 5 of the specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 16; the recitation of "where filter capacity is too low for a permanent filter yet flow rate is too high for a centrifuge, a combination employing the flow rate capability of a filter with the storage capacity of a centrifuge" is vague and indefinite as to what filter capacity is too low for a permanent filter yet flow rate is too high for a centrifuge. In addition, it is not understood as to how a filter capacity can be too low for a permanent filter since you can make a filter any needed size. Lastly, it is not understood as to how a "flow rate" can be too large for a centrifuge as centrifuges can be designed to handle various flow rates including large flow rates.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 13, 14, 16-22, 88, 89 and 91 are rejected under 35 U.S.C. 102(b) as being anticipated by Purvey.

Regarding claims 1-8, 13, 14, 16-22, 88, 89 and 91; Purvey discloses a filtering system for filtering working fluid from a machine comprising a filter (13) having a filter media element having a plurality of filters (20) for filtering said working fluid; said filter having a first inlet receiving working fluid from said machine, a first outlet returning working fluid to said machine, a second inlet receiving cleaning fluid from a source of cleaning fluid, a second outlet exhausting said cleaning fluid; said filter media element having a clean side communicating with said first outlet and said second inlet, and a dirty side communicating with said first inlet and second outlet; said filter having a first flowpath from said first inlet through said filter media element in one direction to said first outlet, and a second flowpath from said second inlet through said filter media element in the opposite direction to said second outlet; said first and second flow paths having common but opposite direction portions through said filter media element; said filter having a filtering mode of operation with said second inlet and second outlet being closed due to fluid pressure away from said second inlet and second outlet respectively, and filtering said working fluid along said first flowpath, and a backwash mode of

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operation with said second inlet said second outlet being open due to fluid pressure toward said second inlet and second outlet respectively, and said cleaning fluid flowing along said second flowpath thereby backwashing contaminated-laden working fluid from said dirty side of said filter media element to said second outlet; (see column 4, lines 18-42) and a centrifugal separator (25) having an inlet connected to said second outlet of said filter, said centrifugal separator (25) having a batch processing mode operative during said backwashing mode operative during said backwashing mode of said filter and receiving said contaminant-laden working fluid from said second outlet of said filter and separating and storing contaminant, said centrifugal separator comprising a housing having a rotor driven to rotate about an axis by a supply of pressurized air from a source of compressed air to his rotor (see column 9, lines 6-11), said rotor having an inner cylindrical sidewall with a hollow interior, and an outer cylindrical sidewall spaced radially outwardly of said inner cylindrical sidewall and defining an annular space therebetween, said inner cylindrical sidewall having a transfer passage therethrough providing communication of said hollow interior with said annular space, said housing having an inlet fir admitting contaminated-laden fluid to said hollow interior of said inner cylindrical sidewall for passing through said transfer passage into said annular space for centrifugal separation upon said rotation, said annular space providing a storage container storing said contaminant, a standpipe circumscribing said inner cylindrical sidewall and dividing said annular space into an inner annular chamber between said standpipe and said inner cylindrical sidewall, and an outer annular chamber between said standpipe and said outer cylindrical sidewall.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-9, 13-22, 88, 89, and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purvey in view of Holm et al.

Purvey et al. discloses a filter (13) which reads on claims 1-8, 13, 14, 16-22, 88, 89 and 91; however, Purvey et al.'s filter (13) does not read on claims 9 and 15. Furthermore, while Purvey et al.'s filter (13) reads on claims 1-8, 13, 14, 16-22, 88, 89 and 91; Purvey et al.'s filter (13) does not include all of the elements, and is not the same type filter as the one discussed in the applicant's specification. Holm et al. discloses a filter (102) which the applicant states on page 4, line 10 to line 11 is like his backflushable filter (16). Therefore, as an alternative rejection to claims 1-8, 13, 14, 16-22, 88, 89 and 91 and as the only rejection to claims 9 and 15; claims 1-9, 13-22, 88, 89 and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purvey in view of Holm et al. as previously stated.

Regarding claims 1-9, 13-22, 88, 89 and 91; Purvey discloses a filtering system as discussed above and inherently or at least obviously including a valve for controlling the supply of pressurized air from the source of compressed air to his rotor. Purvey et al. fails to disclose or fairly suggest that his filter comprises a valve for controlling a supply of pressurized air from a source of compressed air to the second inlet of his filter. Furthermore, since Purvey et al. fails to disclose or fairly suggest a valve for controlling a supply of pressurized air from a source of compressed air to the second inlet of his filter; Purvey et al. clearly fails to disclose that the same source of compressed air supplies both said motive force for said rotor and said cleaning fluid for said filter. It is considered that it would have been obvious to one having ordinary skill in the art at the time of the invention to have replaced the Purvey's filter (13) with Holm et al.'s filter (102) since Purvey and Holm et al both disclose filters for removing solids from liquids

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followed by cleaning their filters by backwashing them. The filtering system as suggested by Purvey in view of Holm et al. includes a valve for controlling a supply of pressurized air from a source of compressed air to the second inlet of the filter and the centrifugal separator includes a valve for controlling a supply of pressurized air from a source of compressed air to their rotor. It is considered that since the filter and rotor both require compressed air, that it would have been obvious to one having ordinary skill in the art at the time of the filtering system as suggested by Purvey et al. in view of Holm's to have used the same source of compressed air to supply pressurized air to both said rotor and said filter to provide the motive force for said rotor and said cleaning fluid for said filter. Lastly, when replacing Holm et al.'s filter (102) for Purvey's filter (13) it is noted that the suggested filtering system of Purvey in view of Holm et al. would not including a plurality of filters as required by claims 18 and 19. It is considered that it would have been obvious to one having ordinary skill in the art at the time of the invention to have duplicated Holm et al.'s filter (102) to create a plurality of filters to better filter the working fluid in the filtering system as suggested by Purvey in view of Holm et al. Furthermore, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Claims 10-12, 23 and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purvey in view of Miller et al.

Regarding claim 10-12, 23 and 90; Purvey discloses the filtering system as discussed above but fails to teach that the storage container portion of his centrifugal separator include a filter matrix (i.e. claim 10), the filter matrix having at least a 75% (i.e. claims 11, 23 and 90) and the filter matrix having at least a 95% (i.e. claim 12)

Regarding claim 10-12, 23 and 90; Miller discloses a centrifugal separator including a storage container portion the storage container portion including a cellular filter matrix (54) for retaining solids, the higher the void volume of Miller's cellular filter matrix (54) the better it would retain solids. Therefore, it is considered that it would have been obvious to one having ordinary skill in the art at the time of the invention for Miller's filter matrix to have a void volume of at least 95%.

Regarding claims 10-12, 23 and 90; it is considered that it would have been obvious to one having ordinary skill in the art at the time of the invention to have added the filter matrix (54) as taught by Miller in the storage container portion of Purvey's centrifugal separator to better retain solids in Miller's storage container portion of his centrifugal separator.

Claims 10-12, 23 and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purvey in view of Holm et al. further in view of Miller et al.

Regarding claims 10-12, 23 and 90; Purvey in view of Holm et al. suggests a filtering system as discussed above but fails to teach or fairly suggest that the storage container portion of their centrifugal separator includes a filter matrix (i.e. claim 10), the

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filter matrix having at least a 75% (i.e. claims 11, 23 and 90) and the filter matrix having at least a 95%. (i.e. claim 12)

Regarding claim 10-12, 23 and 90; Miller discloses a centrifugal separator including a storage container portion the storage container portion including a cellular filter matrix (54) for retaining solids, the higher the void volume of Miller's cellular filter matrix (54) the better it would retain solids. Therefore, it is considered that it would have been obvious to one having ordinary skill in the art at the time of the invention for Miller's filter matrix to have a void volume of at least 95%.

Regarding claims 10-12, 23 and 90; it is considered that it would have been obvious to one having ordinary skill in the art at the time of the invention to have added the filter matrix (54) as taught by Miller in the storage container portion of Purvey in view of Holm's centrifugal separator to better retain solids in Purvey in view of Holm's storage container portion of their centrifugal separator.

Claims 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purvey in view of May.

Regarding claims 28-32; Purvey discloses a filtering system as discussed above but fails to teach that his rotor includes a turbine.

Regarding claims 28-32; May discloses a centrifugal filter which is rotated by a source of air impinging on a turbine, the air inherently or at least obviously being pressurized. (see column 1, lines 59-64)

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Regarding claims 28-32; it is considered that it would have been obvious to one having ordinary skill in the art at the time of the invention to have used a turbine to rotate Purvey's rotor as taught by May since Purvey's rotor is rotated by impinging a fluid (e.g. gas) on some part of the rotor and May teaches that a turbine is well suited for that purpose.

Claims 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purvey in Holm et al. further in view of May.

Regarding claims 28-32; Purvey in view of Holm et al. suggests a filtering system as discussed above but fails to teach or fairly suggest that their rotor include a turbine.

Regarding claims 28-32; May discloses a centrifugal filter which is rotated by a source of air impinging on a turbine, the air inherently or at least obviously being pressurized. (see column 1, lines 59-64)

Regarding claims 28-32; it is considered that it would have been obvious to one having ordinary skill in the art at the time of the invention to have used a turbine to rotate Purvey in view of Holm et al.'s rotor as taught by May since Purvey in view of Holm et al.'s rotor is rotated by impinging a fluid (e.g. gas) on some part of the rotor and May teaches that a turbine is well suited for that purpose.

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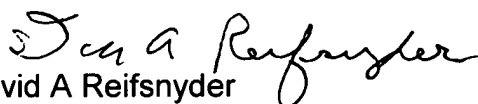
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Verdegan et al. '706, Schwandt et al. and Verdegan et al. '031 who are all commonly owned with the present application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A Reifsnyder whose telephone number is 1-703-308-0456. The examiner can normally be reached on M-F 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda M Walker can be reached on 1-703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 1-703-872-9310 for regular communications and 1-703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 1-703-308-3601.


David A Reifsnyder
Primary Examiner
Art Unit 1723

DAR
January 22, 2003